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Jasvantrai Shah

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EXAMINER

WOLDEKIDAN, HIBRET ASNAKE

ART UNIT

PAPER NUMBER

2613

NOTIFICATION DATE

DELIVERY MODE

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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/747,646	Applicant(s) SHAH, JASVANTRAI	
	Examiner Hibret A. Woldekidan	Art Unit 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Response to Arguments

1. Examiner acknowledges receipt of Applicant's Amendments, remarks, arguments received on 02/14/08. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1- 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu et al. (US 2002/0063916) in view of Erickson et al (6,882,765)

Considering claim 1, Chiu discloses in a network including a router and an optical cross-connect system (OXC) (**See fig. 3 i.e. a net work comprising a router and OXC**), a method for responding to a failure (**See Paragraph 17 i.e. a method of responding to a failure**), the method comprising: detecting the failure in the router (**See Paragraph 17 i.e. detecting the failure in the router**); sending a signal from the router to the OXC(**See Paragraph 17 i.e. sending a signal from the router to OXC**), where the signal indicates the failure (**See Paragraph 17 i.e. the transmitted signal from the router to OXC indicating the failure**);

Chiu further discloses upon receiving failure indication signal from the router, the OXC replaces the failed router to a redundant or protection router **(See Paragraph 15,17,18 i.e. causing the OXC to replace the failed port with a protection or redundant port)**; and transmitting data from the router to the OXC via the protection router **(See Paragraph 18, fig. 3 i.e. transmitting data through the protection or redundant port)**.

Chiu does not specifically disclose the OXC has a working and a protection port in response to a failure causing a working port of the OXC to connect to a protection port of the router in response to detection of the signal.

Erickson teaches the OXC has a working and a protection port in response to a failure causing a working port of the OXC to connect to a protection port of the router in response to detection of the signal **(See fig. 15 element 1531 and 1532, Col. 23 lines 6-27 i.e. OXC has a working port and protection port)**

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Chiu, and modify the OXC to include a working and protection ports in response to a failure causing a working port of the OXC to connect to a protection port of the router in response to detection of the signal, as taught by Erickson, thus allowing a means of minimizing the time to customer service interruption during switching from the failed port to the protection port by having both ports in the same unit, as discussed by Erickson **(Col. 2 lines 63-67 and Col. 3 lines 1-3)**.

Considering claim 2 Erickson teaches the method of claim 1, where the sending further comprises: of sending an in-band signal to the OXC (**See abstract i.e. communicating in-band signal**).

Considering claim 3 Erickson teaches the method of claim 2, where the sending an in-band signal to the OXC further comprises: sending a Synchronous Optical Network (SONET) signal to the OXC (**See abstract, Col. 20 lines 5-10 i.e. communicating SONET channels with the OXC**).

Considering claim 4 Erickson teaches, the method of claim 1, where the sending further comprises: sending an out-of-band signal to the OXC (**See Abstract, Col. 14 line 1-6 i.e. OXC communicates using out-of-band signaling**).

Considering claim 5 Erickson teaches, the method of claim 4, where the sending an out-of-band signal comprises: the step of addressing the out-of-band signal to an Internet Protocol address associated with the OXC (**See Col. 19 lines 1-9 i.e. internet protocol associated with OXC**).

Considering claim 6 Chiu discloses, a method for responding to a failure in a network including a router and an optical cross-connect system (OXC) (**See Paragraph 17,18, fig. 5 i.e. a method of replacing a failure in a network including a router and OXC**), the method comprising: receiving a signal at the OXC from the router (**See Paragraph 17 i.e. receiving signal at OXC from the router**), the signal indicating a failure of a working port in the router (**See Paragraph 17 i.e. receiving failure indicating signal from the router to OXC**); and connecting a protection port of the

router to a working port of the OXC(**See Paragraph 15,17,18, fig. 3 i.e. reestablishing connection using the protection or redundant port of the router**).

Chiu further discloses reestablishing connection using the protection or redundant port (**See Paragraph 15, 17, 18, fig. 3, 4**).

Chiu does not specifically disclose connecting a protection port of the router to a working port of the OXC. Erickson teaches connecting a protection port of the router to a working port of the OXC (**See Col. 23 lines 6-27, fig. 17 i.e. linking the protection port of the router to the working port of the OXC**)

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Chiu, and connect a protection port of the router to a working port of the OXC, as taught by Erickson, thus allowing a means of minimizing the time to customer service interruption during switching from the failed port to the protection port by having both ports in the same unit, as discussed by Erickson (**Col. 2 lines 63-67 and Col. 3 lines 1-3**).

Considering claim 7 Erickson teaches, the method of claim 6, where the receiving further comprises: receiving an in-band signal at the OXC (**See Col. 14 lines 12-16 i.e. communicating in-band signals at the OXC**).

Considering claim 8 Erickson teaches the method of claim 7, where the receiving an in-band signal at the OXC comprises: receiving a Synchronous Optical Network (SONET) signal at the OXC (**See abstract, Col. 20 lines 5-10 i.e. communicating SONET channels with the OXC**).

Considering claim 9 Erickson teaches, the method of claim 6, where the receiving further comprises: receiving an out-of-band signal at the OXC (**See Abstract, Col. 14 line 1-6 i.e. OXC communicates using out-of-band signaling**).

Considering claim 10 Erickson teaches, the method of claim 9, where the receiving an out-of-band signal further comprises: addressing the out-of-band signal to an Internet Protocol address associated with the OXC (**See Col. 19 line 1-9 i.e. internet protocol associated with OXC**).

3. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erickson et al (6,882,765) in view of Pan (7,274,869)

Considering claim 11, Erickson discloses an optical cross-connect system(**See Col. 19 lines 58-59, fig. 15 element 1504 i.e. optical cross connect system(OXC)**) comprising: a spare port for transmitting low priority data from a router (**See Col. 19 lines 5-6, Col. 20 lines 9-11 and 38-41 , fig. 15 element 1532, 1508 i.e. a spare port for transmitting data from a router**); and a working port for transmitting high priority data from a primary router (**See Col. 20 lines 51-53, fig. 15 elements 1531a i.e. working port for transmitting data from the router or client unit**), where the working port is connected to the router in response to a failure of the primary router(**See Col. 23 line 6-27 i.e. working port is connected to a router in case of a failure in primary path**).

Erickson does not specifically disclose transmitting a low priority data using a spare port and transmitting a high priority data using a working port.

Pan teaches transmitting low priority data using a spare port and transmitting high priority data using a working port (**See Col. 15 lines 4-8 and lines 24-27 i.e. primary path for high priority data and alternative or spare path for non priority data**).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Erickson, and transmit a low priority data using a spare port and a high priority data using a working port, as taught by Pan, thus providing an efficient data transmission system by prioritizing data, as discussed by Pan (**Col. 2 lines 32-35 and Col. 3 lines 38-41**).

Considering claim 12, Erickson discloses the optical cross-connection system of claim 11, where the working port is connected to the router in response to receiving an in-band signal from the router (**See Col. 19 lines 1-7, Col. 23 line 6-27, fig. 15 i.e. working port is connected to a router in case of a failure in primary path**).

Considering claim 13, Erickson discloses the optical cross connection system of claim 12, where the working port is connected to the router in response to receiving a Synchronous Optical Network (SONET) signal from the router (**See Col. 19 lines 1-7, Col. 23 line 6-27, fig. 15 i.e. working port is connected to a router in case of a failure in primary path**).

Considering claim 14, Erickson teaches the optical cross-connection system of claim 11, where the working port is connected to the router in response to receiving an out-of-band signal from the router (**See Col. 2 lines 63-67 and Col. 3 lines 1-3, Col. 16**

lines 28-46 i.e. working port is connected to a router in response to an out of bound signal).

4. Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erickson et al (6,882,765) in view of Chiu et al. (US 2002/0063916).

Considering claim 15, Erickson discloses a communications network for transmitting data (**See fig. 7 i.e. optical network for transmitting data**), the communication network comprising: a router for receiving the data from a terminal (**See Col 19 lines 1-7 a router for receiving a data from other units**), the router comprising: a working port for receiving the data from the terminal (**See Col. 19 lines 5-6, Col. 20 lines 22-26, fig. 15 elements 1521 i.e. working ports in the router**); and a protection port for receiving the data from the terminal in response to a failure of the working unit or path(**See fig. 17b element 1702, Col. 22 lines 6-26 i.e. protection port for receiving the data in response to a failure in the working unit or path**)); and an optical cross-connect system (OXC) for receiving the data from the router (**See Col. 19 lines 1-7, fig. 15 elements 1504 i.e. OXC for receiving data from the router**), the optical cross-connect system comprising a working port (**See Col. 20 lines 51-53, fig. 15 elements 1531A i.e. OXC comprising a working port**), where the working port of the OXC is connected to the protection port of the router in response to a signal received from the router indicating the failure of the working port of the router (**See Col. 23 line 6-27 i.e. working port is connected to the protection port of the router in case of a failure the working port**).

Ericson does not specifically disclose the working unit failure that causes the protection port to be activated is a failure in a working port or a router.

Chiu teaches the working unit failure that causes the protection port to be activated is a failure in a working port or a router **(See Paragraph 17, fig. 3 i.e. protection or redundant port activated in response to a failure in a router).**

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Erickson, and activate the protection port as a result of failure in a working port or a router, as taught by Chiu, thus allowing a means of minimizing transmission failure by providing a protection or backup unit for both working port and path, as discussed by Pan **(Paragraph 11).**

Considering Claim 16 Erickson discloses the communications network of claim 15, where the router transmits a signal indicating the failure to the OXC, the signal causing the OXC to connect the protection port to the working port of the OXC **(See Col. 23 line 6-27, fig. 15 i.e. router transmit signal incase of a failure).**

Considering claim 17 Erickson disclose, the communications network of claim 16, where the signal is an in-band signal **(See abstract i.e. in-band signal)**

Considering claim 18 Erickson disclose, the communications network of claim 17, where the in-band signal is a Synchronous Optical Network (SONET) signal **(See Col. 20 lines 5-10 i.e. SONET channels)**

Considering claim 19 Erickson discloses the communications network of claim 16, where the signal is an out-of-band signal **(See Abstract, Col. 2 lines 63-67 and Col. 3 lines 1-3, Col. 16 i.e. an out-of-band signal).**

Considering claim 20 Erickson discloses, the communications network of claim 19, where the out-of-band signal is addressed to an Internet Protocol address associated with the OXC (**See Col. 19 lines 1-9 i.e. internet protocol associated with OXC**).

Conclusions

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HIBRET A. WOLDEKIDAN whose telephone number is (571)270-5145. The examiner can normally be reached on Monday to Thursday from 8:00 a.m. - 4:00 p.m..

Art Unit: 2613

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on (571)272-3078 . The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. A. W./

Examiner, Art Unit 2613

/Kenneth N Vanderpuye/

Supervisory Patent Examiner, Art Unit 2613